

REMARKS

The non-final Office Action dated November 21, 2003 has been reviewed. The Examiner required Applicants to elect a single disclosed species for prosecution on the merits. The Examiner indicated that there are eight (8) distinct species of the claimed invention. These distinct species are identified by the Examiner as FIGURES 8, 9, 10, 12, 12A, 13, 14 and 14A.

Applicants have maintained that only one species of the invention exists. As the Examiner knows from the extensive prosecution of this invention, the invention is directed to an output choke for a D.C. arc welder. The output choke includes a high permeability core having first and second pole pieces and an inductance controlling air gap. The air gap is defined by an end surface on the first and second pole pieces. At least a portion of the air gap has a varying width to vary the inductance of the choke over a current range. The air gap has a converging width that at least partially converges toward the outer edges of the first and second pole pieces. At least a portion of the air gap has a width that is greater than the spacing between either corresponding set of the outer edges of the first and second pole pieces. The air gap has a configuration that substantially prevents inflection points along a saturation curve of the choke.

The air gap disclosed in FIGURES 6, 8, 9, 10, 12, 12A, 14 and 14A are examples of air gaps for chokes of D.C. arc welders that meet the criteria of the claimed invention. The air gap disclosed in FIGURE 13 does not fall within the invention being specifically claimed in the above-identified patent application. Applicants submit that the Examiner has not established that the air gaps disclosed in FIGURES 6, 8, 9, 10, 12, 12A, 14 and 14A are distinct species of the invention in view of the cited art of record. Applicants request that the Examiner withdraw the election requirement.

The Examiner indicated that an objection to the election requirement with electing one of the alleged species would be non-responsive. In view of the election requirement imposed by the Examiner, Applicants elect the alleged species illustrated in FIGURES 6 and 8. The Examiner also required that Applicants identify the claims that are associated with the elected species. Applicants submit that claims 95-97, 101-103, 110-114, 116, 117, 133, 134, and 146-149 are withdrawn and that the remaining are associated with the elected species. The Examiner stated that none of the independent claims are generic to all of the embodiments identified in FIGURES 8, 9, 10, 12, 12A, 13, 14 and 14A. Applicants submit that the independent claims are generic to one or more embodiments disclosed in FIGURES 6, 8, 9, 10, 12, 12A, 14 and 14A.

Applicants submit the claims presently pending in the above-identified patent application are in condition for allowance and a notice to that effect is earnestly solicited.

Respectfully submitted,
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